

THE MINERAL INDUSTRY OF LIBYA

By Philip M. Mobbs

The Great Socialist People's Libyan Arab Jamahiriya was the third largest crude oil producer in Africa after Nigeria and Algeria. In 2003, Libya's proven oil reserves were estimated to be about 36 billion barrels, which were the largest on the African continent, and which ranked the country 8th in the world in proven reserves. The nation's natural gas reserves were about 1.3 trillion cubic meters, which ranked Libya 4th in Africa after Algeria, Nigeria, and Egypt, and 24th in the world (BP plc, 2004).

According to the International Monetary Fund (2003, p. 6, 30; 2004¹), the gross domestic product (GDP) based on purchasing power parity valuation was estimated to be \$52 billion in 2003. Based on economic data available in 2004, the International Monetary Fund (IMF) estimated that Libyan real GDP increased by 9.8% in 2003 compared with a 2.7% increase in 2002. In 2003, the IMF had estimated that Libya's GDP would increase by 5.6% in 2003 and had decreased by 0.2% in 2002. Hydrocarbon production and processing dominated the mineral industry of the country and was also the predominant segment of the economy. In recent years, natural gas and petroleum accounted for about 95% of exports and 60% of Government revenue.

In August 2003, RWE AG of Germany was informed by U.S. Government officials that the 5-year \$64 million oil exploration contract awarded to its German subsidiary RWE Dea AG could subject RWE and its U.S. subsidiary American Water Works Co., Inc., which was acquired by RWE on January 10, 2003, to sanctions under the Iran-Libya Sanctions Act (ILSA) (Gammelin and Preuss, 2003§). In September, the United Nations Security Council formally lifted sanctions that had been imposed on Libya under Security Council Resolutions 748 of 1992 and 883 of 1993. The effect of the influx of foreign investment that had taken place after the U.N. sanctions were initially suspended in 1999, and the continued threat of ILSA and other American sanctions, were expected to minimize the short-term economic benefit of the termination of the U.N. sanctions in 2003 (Richards, 2003; United Nations, 2003§).

Government Policies and Programs

In 2003, the Government proposed to privatize about 360 state-owned companies by 2008. The names of specific public sector companies were not divulged, but ownership changes in the chemical, iron, oil, and steel sectors were suggested. Of the Libyan labor force of 1.5 million people, about 53% were in national and local government service and 24% were employed by public sector companies (International Monetary Fund, 2003, p. 19, 29; ArabicNews.com, 2003§; MENAFN.com, 2003§).

Commodity Review

With the exception of state-owned Libyan Iron and Steel Co. (LISCO), which primarily processed imported raw materials, the nation's nonfuel mineral industry sector made a minor contribution to the economy. Other mineral and mineral-based commodity production included ammonia and urea, cement, clay, gypsum, dolomite and limestone, lime, methanol, salt, sand and crushed stone for the construction industry, and sulfur recovered as a byproduct of gas and oil processing.

Metals

Iron and Steel.—In October, Ispat Industries Ltd. of India signed a technical assistance agreement to help LISCO decrease production costs, improve product quality, and increase sales of steel products.

Mineral Fuels

Natural Gas and Oil.—While Libya's natural gas reserves ranked the country 24th in the world, its production of about 6 billion cubic meters of natural gas in 2003 placed the country 40th on the list of gas-producing countries. The Government proposed to address the paucity of infrastructure for natural gas production. There were several natural gas projects underway which would increase Libya's natural gas output. Eni S.p.A. of Italy and state-owned National Oil Company (NOC) had scheduled initial natural gas production from the Western Libya Gas Project in 2006, but the early completion of the 540-kilometer 8-billion-cubic-meter-per-year-capacity Greenstream pipeline from Mellitah, Libya, to Gela, Sicily, was expected to allow production to start earlier (Africa Energy Intelligence, 2003; Eni S.p.A., 2004§; U.S. Energy Information Administration, 2004§).

In September, NOC of Libya (50%), Cie. des Pétroles Total Libye (the field operator with 37.5% equity interest), and Wintershall AG of Germany (12.5%) began production from the Al-Jurf Oilfield, which was located offshore block NC-137. The field was expected to produce 40,000 42-gallon barrels per day when fully operational (Total S.A., 2003§).

Delays and negotiations continued for most of the exploration contracts on the 137 blocks that NOC had offered to investors in 2000 as part of the Exploration and Production Sharing Agreement-3 (ESPA-3) program. In 2003, exploration contracts had been signed on four onshore and two offshore blocks with the joint venture of OMV AG of Austria and Repsol YPF, S.A. of Spain, on six blocks in

¹ References that include a section mark (§) are found in the Internet References Cited section.

three basins with RWE Dea, and on five onshore and one offshore blocks with the consortium of Woodside Energy Ltd. of Australia (45%), Repsol Exploración Murzuq SA (35%), and Hellenic Petroleum S.A. of Greece (20%). NOC proposed to offer additional blocks for exploration contracts as part of the proposed ESPA-4 licensing round.

References Cited

- Africa Energy Intelligence, 2003, Timetable for gas pipelines: Africa Energy Intelligence, no. 345, May 7, p. 4.
BP plc, 2004, Statistical review of world energy: London, United Kingdom, BP plc, June, 40 p.
International Monetary Fund, 2003, The Socialist People's Libyan Arab Jamahiriya—2003 Article IV consultation—Staff report—Staff statement and public information notice on the executive board discussion: Washington, DC, International Monetary Fund Country Report no. 03/327, 51 p.
Richards, Catherine, 2003, New dawn: Middle East Economic Digest, v. 47, no. 34, August 22, p. 21-28.

Internet References Cited

- ArabicNews.com, 2003 (June 14), Qathafi calls for fundamental economic reforms, accessed August 14, 2003, at URL <http://www.arabicnews.com/ansub/Daily/Day/030614/2003061413.html>.
Eni S.p.A., 2004 (October 7), Eni—the Western Libya Gas Project, the first project that enhances the value of the Libyan natural gas through export and trading in Europe, gets underway, accessed October 17, 2004, at URL <http://www.eni.it/eniit/eni/internal.do?icommand=show&RID=@2BsBb|0?xoidcmWopk&lang=en&backRID=@22a9a|0?xoidcmWopk&backPage=0&realContext=-1073751995>.
Gammelin, Cerstin and Preuss, Olaf, 2003 (August 6), US warns RWE on Libya contract, accessed August 7, 2003, via URL <http://www.zawya.com>.
International Monetary Fund, 2004 (September), World economic outlook database, accessed September 29, 2004, at URL <http://www.imf.org/external/pubs/ft/weo/2004/02/data/dbginim.cfm>.
MENAFN.com, 2003 (October 16), Libya to privatize hundreds of plants, accessed October 17, 2003, via URL <http://www.menafn.com>.
Total S.A., 2003 (September 5), Libye—Entrée en production du champ offshore d'Al Jurf sur le bloc C 137, accessed September 5, 2003, at URL <http://www.total.com/ho/fr/library/press/2003/030905.htm>.
United Nations, 2003 (September 12), Security Council lifts sanctions against Libya imposed after Lockerbie bombing, accessed September 13, 2003, at URL <http://www.un.org/apps/news/storyAr.asp?NewsID=8225&Cr=libya&Cr1=&Kw1=libya&Kw2=sanctions&Kw3=>.
U.S. Energy Information Administration, 2004 (January), Country analysis brief—Libya, accessed March 22, 2004, at URL <http://www.eia.doe.gov/emeu/cabs/libya.html>.

TABLE 1
LIBYA: ESTIMATED PRODUCTION OF MINERAL COMMODITIES¹

(Thousand metric tons unless otherwise specified)

Commodity ²	1999	2000	2001	2002	2003
Cement, hydraulic	3,000	3,000	3,000	3,300	3,300
Gas, natural:					
Gross million cubic meters	9,200	11,000	11,400	11,000	12,000
Dry do.	5,200	5,400	5,600	5,700	6,000
Gypsum	150	175	150	150	150
Iron and steel, metal:					
Direct-reduced iron ³	1,330 ⁴	1,500 ⁴	1,090 ⁴	1,170 ⁴	1,340 ⁴
Crude steel	945 ⁴	1,055 ⁴	846 ⁴	886 ⁴	989 ⁴
Lime	270	270	250	250	250
Nitrogen:					
N content of ammonia	552 ⁴	552 ⁴	495 ⁴	533 ⁴	577 ⁴
N content of urea	386 ⁴	407 ⁴	365 ⁴	400 ⁴	425 ⁴
Petroleum:					
Crude thousand 42-gallon barrels	520,000	538,000	520,000	502,000	543,000
Refinery products:					
Gasoline do.	10,000	12,000	12,000	12,000	12,000
Kerosene and jet fuel do.	7,000	8,400	8,400	8,400	8,400
Distillate fuel oil do.	20,000	24,000	24,000	24,000	24,000
Residual fuel oil do.	25,000	30,000	30,000	30,000	30,000
Other do.	13,000	15,600	15,600	15,600	15,600
Total do.	75,000	90,000	90,000	90,000	90,000
Salt	30	40	40	40	40
Sulfur, byproduct of petroleum and natural gas	13	13	15	15	15

¹Table includes data available through July 2004. Estimated data are rounded to no more than three significant digits; may not add to totals shown.

²In addition to the commodities listed, a variety of brick, clay, dolomite, limestone, methanol, sand, crushed construction stone, and tile was produced, and natron (soda ash) may have been produced, but available information is inadequate to make estimates of output levels. Natural gas liquids also were produced but were blended with crude petroleum and reported as part of that total.

³Includes hot-briquetted iron.

⁴Reported figure.